

WHAT IS CLAIMED IS:

1. An information management system comprising:
  - a center processing apparatus for performing user-information analysis; and
  - a plurality of information processing apparatuses for storing user information;wherein:
  - said center processing apparatus comprises:
    - acquiring means for acquiring user information collected from each of the information processing apparatuses;
    - analyzing means for analyzing the user information acquired by said acquiring means;
    - user-information recording means for recording, in a database, the information obtained by the analysis by said analyzing means;
    - selecting means for selecting, based on the user information obtained by the analysis by said analyzing means, optimal procedures for users of the information processing apparatuses; and
    - providing means for providing the users with the optimal procedures selected by said selecting means; and
  - each of said information processing apparatuses comprises:

operation-information accepting means for accepting operation information from the user;

signal processing means for processing an input signal, based on the operation information accepted by said operation-information accepting means; and

storage means for storing, as the user information, the operation information and information concerning the input signal.

2. An information processing method for an information management system comprising a center processing apparatus for performing user-information analysis and a plurality of information processing apparatuses for storing user information, wherein:

a center processing method for said center processing apparatus comprises:

an acquiring step for acquiring user information collected from each of the information processing apparatuses;

an analyzing step for analyzing the user information acquired in the acquiring step;

a user-information recording step for recording, in a database, the information obtained by the analysis in the analyzing step;

a selecting step for selecting optimal procedures

for users of the information processing apparatuses, based on the information obtained by the analysis in the analyzing step; and

a provision step for providing the users with the procedures selected in the selecting step; and

an information processing method for each of the information processing apparatuses comprises:

an operation-information accepting step for accepting operation information from the user;

a signal processing step for processing an input signal, based on the operation information accepted in the operation-information accepting step; and

a storage step for storing, as the user information, the operation information and information concerning the input signal.

3. A center processing apparatus for processing user information from a plurality of information processing apparatuses, said center processing apparatus comprising:

acquiring means for acquiring user information collected from each of the information processing apparatuses;

analyzing means for analyzing the user information acquired by said acquiring means;

user-information recording means for recording, in a

database, the information obtained by the analysis by said analyzing means;

selecting means for selecting, based on the information obtained by the analysis by said analyzing means, optimal procedures for users of the information processing apparatuses; and

providing means for providing the users with the procedures selected by said selecting means.

4. A center processing apparatus according to claim 3, wherein said selecting means includes determining means which calculates a variation in the user information and which determines whether or not the variation is greater than a predetermined threshold, and said selecting means classifies the users into predetermined groups based on the result of determination by said determining means.

5. A center processing apparatus according to claim 4, further comprising procedure recording means in which the optimal procedures are recorded so as to differ depending on the predetermined groups.

6. A center processing apparatus according to claim 4, wherein said providing means includes:

basic part determining means which, based on the result

of determination by said determining means, acquires one procedure from said procedure recording means, and which, based on the acquired procedure, determines a basic part of a function to be provided to the user; and

unique part determining means which, based on the user information analyzed by said analyzing means, determines a part unique to the user in the function.

7. A center processing apparatus according to claim 4, further comprising updating means which, based on the user information recorded by said user-information recording means, updates the threshold in said determining means.

8. An information processing method for a center processing apparatus for processing user information from a plurality of information processing apparatuses, said information processing method comprising:

an acquiring step for acquiring user information collected from each of the information processing apparatuses;

an analyzing step for analyzing the user information acquired in the acquiring step;

a user-information recording step for recording, in a database, the information obtained by the analysis in the analyzing step;

a selecting step for selecting, based on the information obtained by the analysis in the analyzing step, optimal procedures for users of the information processing apparatuses; and

a providing step for providing the users with the procedures selected in the selecting step.

9. A program used with a center processing apparatus for processing user information from a plurality of information processing apparatuses, said program comprising:

an acquisition control step for controlling acquisition of user information collected from each of the information processing apparatuses;

an analysis control step for controlling analysis on the user information acquired in the acquisition control step;

a user-information recording step for recording, in a database, the information obtained by the analysis in the analysis control step;

a selection-control step for controlling, based on the information obtained by the analysis in the analysis control step, selection of optimal procedures for users of the information processing apparatuses; and

a provision-control step for controlling provision of the procedures selected in the selection-control step to the

users.

10. A recording medium with a program for a center processing apparatus recorded thereon, the center processing apparatus processing user information from a plurality of information processing apparatuses, said program comprising:

an acquisition control step for controlling acquisition of user information collected from each of the information processing apparatuses;

an analysis control step for controlling analysis on the user information acquired in the acquisition control step;

a user-information recording step for recording, in a database, the information obtained by the analysis in the analysis control step;

a selection-control step for controlling, based on the information obtained by the analysis in the analysis control step, selection of optimal procedures for users of the information processing apparatuses; and

a provision-control step for controlling provision of the procedures selected in the selection-control step to the users.

11. An information processing apparatus comprising:  
operation-information accepting means for accepting

operation information from a user;

signal-processing means for processing an input signal in accordance with a predetermined procedure, based on the operation information accepted by said operation-information accepting means; and

storage means for storing, as user information to be provided to a provider of said information processing apparatus, the operation information and information concerning the input signal,

wherein the procedure is determined based on past user information of the user.

12. An information processing apparatus according to claim 11, wherein said storage means stores, as the operation information, the value of a parameter set by the user and a time that the parameter is set by the user.

13. An information processing apparatus according to claim 11, wherein said signal processing means performs an image creating process by performing classification adaptive processing on an input information signal.

14. An information processing apparatus according to claim 11, wherein said signal processing means is removable from said information processing apparatus.



15. An information processing method comprising:  
an operation-information accepting step for accepting operation information from a user;

a signal processing step for performing, on an input signal, processing based on the operation information accepted in the operation-information accepting step in accordance with a predetermined procedure; and

a storage step for storing, as user information to be provided to a provider of said information processing apparatus, the operation information and information concerning the input signal,

wherein the procedure is determined based on past user information of the user.

16. A program executed by a computer, comprising:  
an operation-information-acceptance control step for controlling reception of operation information from a user;

a signal-processing control step for controlling, based on the operation information accepted in the operation-information-acceptance control step, processing on an input signal in accordance with a predetermined procedure; and

a storage control step for storing, as user information to be provided to a provider of an information processing apparatus, the operation information and information

concerning the input signal.

17. A recording medium with a program recorded thereon, the program being executed by a computer, the program comprising:

an operation-information-acceptance control step for controlling reception of operation information from a user;

a signal-processing control step for controlling, based on the operation information accepted in the operation-information-acceptance control step, processing on an input signal in accordance with a predetermined procedure; and

a storage control step for storing, as user information to be provided to a provider of an information processing apparatus, the operation information and information concerning the input signal.

18. An information processing apparatus for performing predetermined image processing on an input image, comprising:

extracting means for extracting a characteristic amount representing the characteristics of the input image;

setting means for setting conditions on the image processing;

image processing means for performing the image processing on the input image based on the conditions set by

said setting means; and

storage means for storing the characteristic amount extracted by said extracting means and the conditions set by said setting means so as to be associated with each other.

19. An information processing apparatus according to claim 18, further comprising selecting means for selecting the input image,

wherein said storage means stores selection information concerning the input image selected by said selecting means, the characteristic amount extracted by said extracting means, and the conditions set by said setting means so as to be associated with one another.

20. An information processing apparatus according to claim 18, wherein said storage means provides storage content of said storage means to a business entity via a network.

21. An information processing apparatus according to claim 18, wherein said image processing means transforms the number of pixels or transforms an interlaced image to a progressive image, and performs the image processing by performing image-quality adjustment in which a resolution and a noise eliminating factor are adjusted or by enlarging

the input image at a predetermined enlargement ratio.

22. An image processing method for performing predetermined image processing on an input image, comprising:

- an extracting step for extracting a characteristic amount representing the characteristics of the input image;

- a setting step for setting conditions on the image processing;

- an image processing step for performing the image processing on the input image based on the conditions set in the setting step; and

- a storage step for storing the characteristic amount extracted in the extracting step and the conditions set in the setting step so as to be associated with each other.

23. A recording medium with a program recorded thereon, the program performing predetermined image processing on an input image, said program comprising:

- an extraction-control step for controlling extraction of a characteristic amount representing the characteristics of the input image;

- a setting-control step for controlling setting of conditions on the image processing;

- an image-processing control step for controlling

execution of the image processing on the input image based on the conditions set in the setting-control step; and

a storage-control step for controlling storage of the characteristic amount extracted in the extraction-control step and the conditions set in the setting-control step.

24. A program for performing image processing on an input image, said program comprising:

an extraction-control step for controlling extraction of a characteristic amount representing the characteristics of the input image;

a setting-control step for controlling setting of conditions on the image processing;

an image-processing control step for controlling execution of the image processing on the input image based on the conditions set in the setting-control step; and

a storage-control step for controlling storage of the characteristic amount extracted in the extraction-control step and the conditions set in the setting-control step.